From: GT1100@DNVPS.com [mailto:GT1100@DNVPS.com]
Sent: Thursday, May 23, 2013 8:10 PM
To: eagle.virginia@aet-tankers.com
Cc: rlove@aet-tankers.com
Subject: EAGLE VIRGINIA, FUEL ANALYSIS REPORT, FUJAIRAH, 21-MAY-2013, SAMPLE : FUJ1306091

To: The Master Of 'EAGLE VIRGINIA'
Attn: Chief Engineer

Cc: AMERICAN EAGLE TANKERS, INC.
Attn: Mr Robert Love, Bunker Manager

DNV Petroleum Services - Fuel Analysis Report dated: 23-May-2013

Vessel: **EAGLE VIRGINIA (9230878)**

Sample Number	FUJ1306091
Product Type	(HFO)
Bunker Port	FUJAIRAH
Bunker Date	21-May-2013
Sampling Point	SHIP MANIFOLD
Sampling Method	CONTINUOUS DRIP
Sent From	FUJAIRAH
Date Sent	22-May-2013
Arrived at Lab	22-May-2013
Supplier	OMTI
Loaded From	ALIA
Quantity per C.Eng.	300

Seal data DNVPS, SEAL INTACT, 7357403

Related Samples

Supplier	7357401
Ship	7357404
SHIP MARPOL	7357402
MARPOL	10564

Receipt Data	Unit	
Source Of Data		B.D.N
Density @ 15°C	kg/m³	989.2
Viscosity @ 50°C	mm²/s	33.0
Sulfur	% m/m	0.90
Volume	m³	UNKNOWN
Quantity	MT	292.662

Tested Parameter	Unit	Result	RMG380
Density @ 15°C	kg/m³	988.3	991.0
Viscosity @ 50°C	mm²/s	43.2	380.0
Water	% V/V	0.3	0.5
Micro Carbon Residue	% m/m	5	18
Sulfur	% m/m	1.26	1.00
Total Sediment Potential	% m/m	0.01	0.10
Ash	% m/m	0.02	0.15
Vanadium	mg/kg	23	300
Sodium	mg/kg	11	
Aluminium	mg/kg	16	

Silicon	mg/kg	15	
Iron	mg/kg	7	
Nickel	mg/kg	10	
Calcium	mg/kg	5	
Magnesium	mg/kg	1	
Zinc	mg/kg	LT 1	
Phosphorus	mg/kg	LT 1	
Potassium	mg/kg	6	
Pour Point	°C	27	30
Flash Point	°C	GT 70	60
Acid Number	mg KOH/g	0.07	
Strong Acid Number	mg KOH/g	0.00	

Calculated Values

Aluminium + Silicon	mg/kg	31	80
Net Specific Energy	MJ/kg	40.70	
CCAI (Ignition Quality)	-	877	

Note:
LT means Less Than, GT means Greater Than.

Specification Comparison :

Results compared with your amended ISO 8217:2005 specification RMG380, table 2.
Based on this sample please note the following:

- Significantly Exceeds : Sulfur

Note: Sulfur has been retested and confirmed.

Operational Advice :

Approximate fuel temperatures:

Injection:
95°C for 10 mm²/s
80°C for 15 mm²/s
70°C for 20 mm²/s
65°C for 25 mm²/s

Transfer :
40°C

Sulfur - Based on this commercial sample, the fuel oil is potentially non-compliant if used within a designated Emission Control Area (ECA, ref. MARPOL Annex VI Reg. 14(4)). It is recommended that the situation is recorded through a Note of Protest(NoP). See DNVPS Instruction Manual. Please note that
the official MARPOL sample provided by the supplier is the governing sample regarding the compliance with this statutory requirement.

Pour point - Maintaining a fuel temperature about 10°C above the pour point is
recommended for satisfactory storage.

Best Regards,
On behalf of DNV Petroleum Services Pte Ltd
Nivin Paul Panackal
Assistant Technical Support Engineer

End of Report for EAGLE VIRGINIA

Reference to part(s) of this report which may lead to misinterpretation is prohibited.

NOTE: Please note that our lab in Oslo is no longer in operation. The latest revision(revision 25, November 2012) of our Air Courier Directory contains instructions on which lab samples should be sent to. Reporting may be delayed for samples that from now on arrive in Oslo. If you have any questions or do not have the latest version of the air courier directory onboard, please contact your nearest DNVPS office.

For technical or operational advice or further information on this report please contact your nearest DNVPS office or contact us directly at
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Email : Fujairah@dnvps.com